

IN THE CLAIMS

Claim 1 has been amended as follows:

1. (Currently Amended) A method for surface contouring of a three-dimensional image of an object comprising the steps of:

placing a ~~first~~ set of planes through the three-dimensional image, the planes of the set of planes intersecting in a straight line and being at respectively different rotational angles around said straight line;

determining contours that are imaged in each of the planes of the ~~first~~ set of planes and that are associated with a surface contour of the three-dimensional image; and

combining the contours determined in each plane of the first set of planes into a surface grid associated with the surface contour of the three-dimensional image; and

displaying said three-dimensional image with said surface contour.

Claim 2 has been cancelled.

2. (Cancelled)

Claim 3 has been amended as follows:

3. (Currently Amended) A method as claimed in claim ~~[[2]]~~ 1 wherein the ~~first~~ straight line proceeds substantially through the geometric center of the three-dimensional image.

4. (Original) A method as claimed in claim 3 wherein said three-dimensional image is formed by a volume data set and comprising filtering said volume dataset to determine the geometric center of the three-dimensional image.

5. (Previously Presented) A method as claimed in claim 3 comprising he automatically determining the geometric center of the three-dimensional image.

Claim 6 has been amended as follows:

6. (Currently Amended) A method as claimed in claim 3 comprising specifying the image contents of each plane of the first set of planes in Cartesian coordinates and, for each plane, determining the contours in that plane by:

applying a coordinate transformation to polar coordinates approximately with regard to the geometric center of the three-dimensional image, and thereby unwinding the contour; and determining the contour in the transformed plane.

7. (Previously Presented) A method as claimed in claim 6 comprising determining the contour in the transformed plane, by continuation criteria in the direction of the angular coordinate of the polar coordinator with an optimization for minimizing accumulated point-to-point changes.

8. (Original) A method as claimed in claim 6 comprising improving the contour in the transformed plane by dynamic optimization.

Claim 9 has been amended as follows:

9. (Currently Amended) A method as claimed in claim ~~[[2]]~~ 1 wherein the set of planes is a first set of planes and wherein said straight line is a first straight line, and comprising:

placing a second set of planes through the three-dimensional image with the planes of the second set of planes intersecting in a second straight line;

orienting said second straight line perpendicularly to said first straight line;

determining the contours that are imaged in each of the planes of the second set of planes and that are associated with the surface contour of the three-dimensional image; and

together with the contours determined in each plane of the first set of planes, combining the contours determined in each plane of the second set of planes into the surface grid associated with the surface contour of the three-dimensional image.

10. (Cancelled)

11. (Previously Presented) A method as claimed in Method according to claim 40 9 wherein the first straight line and the second straight line intersect in the geometric center of the three-dimensional image.

12. (Previously Presented) A method as claimed in claim 1 comprising acquiring the three-dimensional image with a medical imaging device, as representation of a part of a living organism of said subject.

13. (Original) A method as claimed in claim 12 comprising determining the geometric center of the three-dimensional image during a navigation-guided treatment of the living organism.